

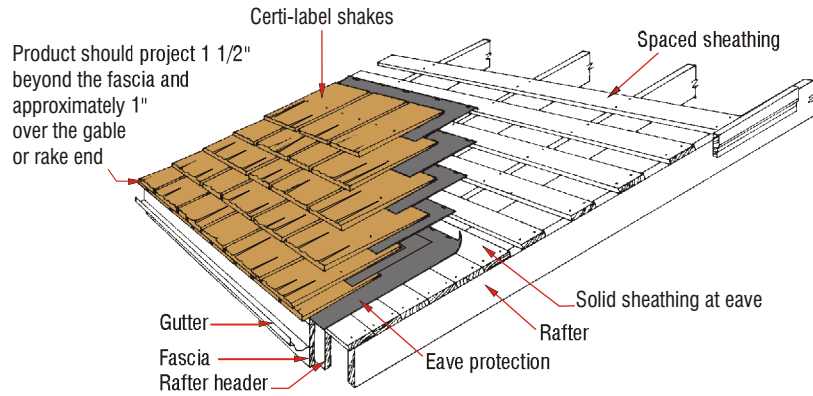
**Sheathing**

Shakes and shingles may be applied over spaced sheathing. Spaced sheathing is usually 1 x 4 or 1 x 6 softwood boards and shall not be less than 1 x 4 boards.

Solid sheathing is acceptable and may be required in seismic regions or under treated shakes and shingles. Solid sheathing is used in areas with wind-driven snow. Please note that the only solid sheet sheathing tested with shakes and shingles is plywood. Check with your local building official for plywood thickness/ dimensions. Eave protection is used on the edge where 36" felt underlay is used and should extend up at least 24" beyond the exterior wall but it is not meant to cover the entire roof.

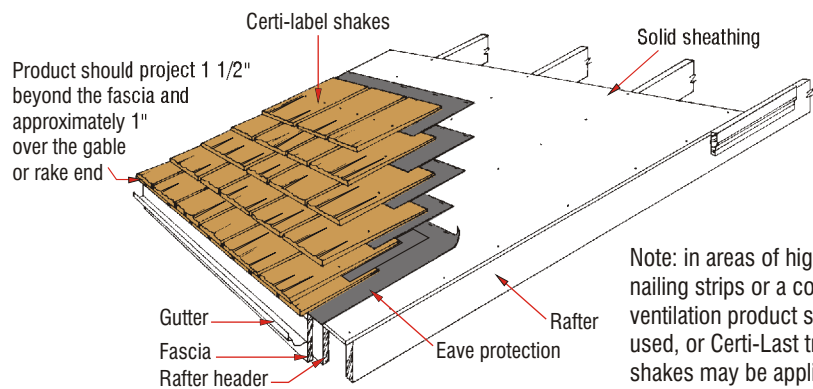
**Staggered butt applications**

Staggered butt applications are made by shortening the exposure less than the greater maximum exposure. No shakes or shingles shall be applied greater than the maximum exposure allowed. Check with local building codes for approval of this installation method.



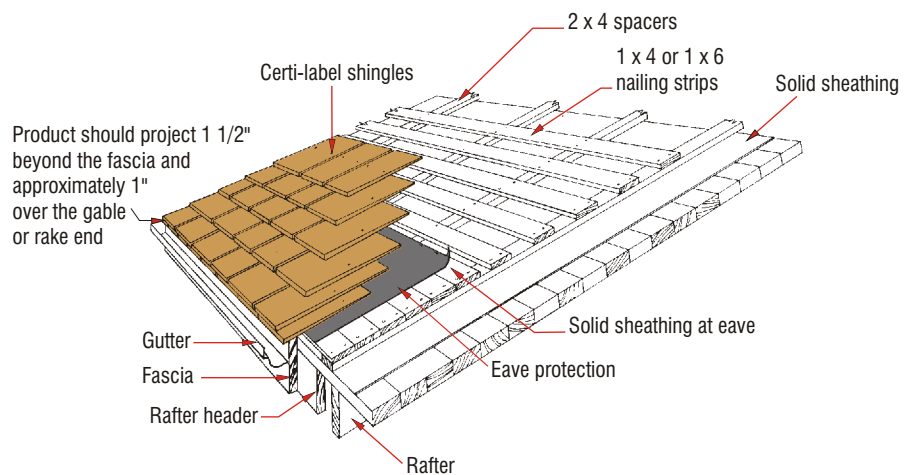
**Figure 1: Spaced Sheathing**

For applications using varied exposures, the center of the sheathing board should be equal to the distance of the exposure.



Note: in areas of high humidity, nailing strips or a continuous ventilation product should be used, or Certi-Last treated shakes may be applied directly to the deck.

**Figure 2: Solid Sheathing**



**Figure 3: Spaced Over Solid Combination Sheathing**

This is the preferred system for shingle application, in areas with high humidity or where additional ventilation is required. When using Certi-Last products, they may be applied directly to the deck.